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PN - JP2200200 A 19900808
PD - 1990-08-08
PR - JP19890261139 19891005; JP19880254348 19881007
OPD - 1988-10-07
TI - DETERMINING METHOD OF NADH AND DETERMINATION OF BIL
ACID USING THE SAME METHOD
IN - SHIRAHASE YASUSHI; TAKAHASHI MASAMITSU; WATATSU
YOSHIFUMI
PA - INT REAGENTS CORP
IC - C12Q1/32

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TI - Measuring bile acid using reduced nicotinamide adenine
di:nucleotide - measured by glutathione reductase and glutathione
or cysteine reductase and cysteine and reacting prod. with
di:sulphide-thiol reagent
PR - JP19880254348 19881007; JP19890261139 19891005
PN - JP2200200 A 19900808 DW199038 000pp
- JP2761768B2 B2 19980604 DW199827 C12Q1/32 006pp
PA - (KOKU-N) KOKUSAI SHIYAKU KK
IC - C12Q1/26 ; C12Q1/32
AB - J02200200 Beta-nicotinamide adenine dinucleotide (reduced form)
(NADH) concn. is measured by reacting NADH and glutathione
(oxidised form) in the presence of glutathione reductase; or NADH
and L-cystine are reacted in the presence of cystine reductase, so
as to form beta-nicotinamide adenine dinucleotide (oxidised type)
(NAD⁺) and glutathione (reduced type) or NAD⁺ and L-cysteine,
respectively. The glutathione (reduced type) or L-cysteine is
reacted with a disulphide type thiol-determining reagent whereupon
the thiol cpd. to be formed by the reaction is measured to finally
determine the intended NADH.
- The disulphide type thiol-determining reagent is typically
5,5'-dithiobis(2-nitrobenzoic acid) (DTNB).
- USE/ADVANTAGE - Determination of NADH with high accuracy and
high sensitivity is possible. Additionally, determination of bile acid is
also possible by the use of the method, in which bile acid is reacted
with NAD⁺ in the presence of 3-alpha-hydroxysteroid
dehydrogenase, and the thus produced NADH is determined. (7pp
Dwg.No.0/0)
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IN - TAKAHASHI MASAMITSU; others02

PA - INTERNATL REAGENTS CORP

TI - DETERMINING METHOD OF NADH AND DETERMINATION OF BIL
ACID USING THE SAME METHOD

AB - PURPOSE: To make possible to measure in high accuracy by
reacting reduction-type beta-nicotinamide adenine
dinucleotide (NADH) with oxidation-type glutathione in the presence
of specific enzyme.

- CONSTITUTION: Oxidation-type glutathione, glutathione reductase
and pH 5.5-8 buffer solution containing disulfide-type thiol
determining reagent of 5,5'-dithiobis(2-nitrobenzoic acid) are added
to a sample containing NADH and reacted at about 37 deg.C for
5-20 min. Next, oxidation-type beta-nicotinamide adenine
dinucleotide (NAD⁺) and reduction-type glutathione are
generated in a reacting solution and thiol compound is conjugately
generated from the determining reagent. Then, light absorbancy at
300-450nm as characteristic wavelength of the thiol compound is
measured to determine NADH. Bile acid is reacted with NAD⁺ in
the presence of 3alpha-hydroxysteroid dehydrogenase at pH 5.5-8,
as necessary, and bile acid is determined according to generated
amount of NADH.

I - C12Q1/32